

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Patent Application of: Marc Schaepkens, et al.

Serial No.: 10/779,373

Art Unit: 1794

Confirmation No.: 7897

Filed: 17 February 2004

Examiner: Kevin R. Kruer

Title: **COMPOSITE ARTICLES HAVING DIFFUSION BARRIERS AND DEVICES
INCORPORATING THE SAME**

REPLY BRIEF

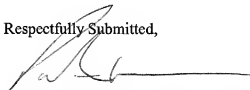
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer dated October 1, 2009, and in accordance with
C.F.R. § 41.41, the Applicant submits the following reply.

Respectfully Submitted,



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Reply

The Appellant submits the following reply to section (10) “Response to Argument”, item (B) in Examiner’s Answer.

B. Otto does not disclose the “varies continuously” feature.

The Appellant has discussed the method of Otto to clearly demonstrate the differences in the characteristics of the final product. The Answer seems not to disagree with the Appellant’s description but rather with the Appellant’s conclusion. However, it is the Answer’s very reliance on the methods to support its improper conclusion that requires the discussion. The method disclosed in Otto does not support nor lead one skilled in the art to the Answer’s conclusion.

The Answer states there is no record which demonstrates that the gradient layer of Otto exhibits step-wise increases. Appellant argues the record is quite the contrary, the record as noted in the Appeal is packed with passages that clearly show the gradient layer is composed of step wise increases, as Otto even contrasts its method with that of continuous methods; likewise there is no record in Otto of the gradient layer varying substantially continuously, as required in the claims.

The Answer points to Otto’s use of “gradient **layer**” as having some dispositive effect, suggesting it precludes “a series of sub layers”. This is curious for several reasons. First, Otto describes exactly the opposite, Otto describes elementary layers (single layers) formed by each pulse and forming gradient layers created by multiple pulses each creating a thin layer. Secondly, a sub layer by its very definition includes being subordinate or secondary to a layer. The Answer’s attempt at Linguistics is without merit.

The Answer also states improperly, that Otto teaches a gradient layer wherein the composition of the gradient layer changes every 10 angstroms. The Appellant notes that nowhere does Otto teach such a layer (e.g. one that changes compositions every 10 angstroms). Furthermore, the relationship of molecular size to the layer thickness is a *non sequitur* as small

molecules are several times smaller than 10 angstroms and large molecules may be several times larger.

Conclusion

Appellant has demonstrated that the prior art reference Otto does not disclose the “varies...continuously” feature as relied upon by the office and the Answer does not persuasively rebut the Appellants’ arguments.